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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Sadafuku HAYASHI

Serial No.: 10/748,165

Group Art Unit: 2617

Filed: December 31, 2003

Examiner: Nghi H. Ly

For: MOBILE COMMUNICATION SYSTEM, RADIO TERMINAL USED THEREFOR,
RADIO NETWORK CONTROLLER AND OPERATION CONTROL METHOD
THEREFOR

MS Appeal Brief - Patents

Honorable Commissioner of Patents

Alexandria, VA 22313-1450

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

Sir:

In response to the Notification of Non-Compliant Appeal Brief, dated June 21, 2007, Appellant respectfully submits as a replacement section a revised Summary of Claimed Subject Matter intended to replace that presented on page 7 of the Appeal Brief submitted September 14, 2006. The revised Summary of Claimed Subject Matter includes references to the specification by page and line numbers, and to the drawings, and addresses, in particular, the subject matter of concern as indicated in the Notification.

More specifically, the Office contends, on page 3 of the Notification of Non-Compliant Appeal Brief, that Appellant's response filed on February 7, 2007 still fails to meet 37 CFR 41.37(c)(1)(v), allegedly because the Summary of Claimed Subject Matter does not explain "if the number of radio terminals connected to the controller associated with the second cell is less than the predetermined number, a dedicated channel is set between the radio terminal and the controller associated with the second cell; if the number of radio terminals connected to the controller associated with the second cell is equal to or greater than the predetermined number, a common channel is set between the radio terminal and the controller associated with the second cell; and the data is delivered from the controller associated with the second cell to the radio terminal over the set channel" as recited in independent claims 28-30.

Application/Control No. 10/748,165
Docket No. 03-004712
YAN.041

Pursuant to MPEP § 1205.03(B), attached to this Response is a revised Summary of Claimed Subject Matter in compliance with 37 C.F.R. 41.37(c)(1)(v). Appellant respectfully requests that the Office replace the Summary of Claimed Subject Matter with the enclosed revised Summary. The Appeal Brief is submitted to be in full compliance with all applicable requirements.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date:

23 July 2007

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Peter F. McGee', written over a horizontal line.

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SUMMARY OF CLAIMED SUBJECT MATTER

The invention is directed to mobile communications systems. The systems are arranged and operated to deliver identical data from a data source to a plurality of radio terminals. The mobile communication system includes a plurality of radio network controllers (RNCs), each controller maintaining a count of the number of radio terminals connected to the controller to receive the data from the data source and control delivery of the data within an associated cell. The methods and systems accommodate movement of the radio terminal from the first cell to a second cell by connecting the radio terminal to the controller associated with the second cell and responsively decrementing the count of connected radio terminals maintained by the controller associated with the first cell and incrementing the count of connected radio terminals maintained by the controller associated with the second cell. The protocol for delivering data is determined based on a comparison of connected radio terminal counts to predetermined numbers.

If the number of radio terminals connected to the controller associated with the second cell is less than the predetermined number, a dedicated channel is set between the radio terminal and the controller associated with the second cell; if the number of radio terminals connected to the controller associated with the second cell is equal to or greater than the predetermined number, a common channel is set between the radio terminal and the controller associated with the second cell; and the data is delivered from the controller associated with the second cell to the radio terminal over the set channel" as recited in independent claims 28-30. See page 10, line 14 to page 11, line 23.

FIG. 4 depicts the operation procedure of the present invention. FIG. 4 shows an operation sequence among the UE 20, the moving destination RNC 5, and the moving source RNC 4 shown in FIG. 5. As a premise in this embodiment, it is assumed that the UE 20 has moved from the cell 10 under control of the RNC 4 to the cell 11 under control of the RNC 5 during a period until the UE 20 could actually receive service data after it joined the MBMS service (an idle mode or a standby state), and that data of the MBMS service has already been transmitted to the moving destination cell 11 according to the PtP system. In this

embodiment, steps S11 to S15 of the sequence are identical with those in FIG. 2 in the first embodiment.

Thereafter, judgment on the PtP system and the PtM system is performed in the PtP/PtM judgment unit 42 in the RNC 5. Since this judgment depends upon the number of UEs, the number of UEs (a counted value of the UE number counting unit 41) and a threshold value are compared.

If the number of UEs is smaller or less than the threshold value (Y in step S17), then the PtP system is maintained, and service data is delivered through a dedicated channel for each UE. Therefore, an RB Setup message is also sent to the UE 20 from the RB setting unit 43 of the RNC 5 such that the data is delivered by the PtP system (step S18). This message includes a parameter indicating a channel of the radio bearer.

If it is judged in step S17 that the number of UEs is equal to or more than the threshold value, the PtP system is switched to the PtM system in the RB setting unit 43 (step S19), and a message for setup of the RB (radio bearer) for the MBMS service is sent to the UE 20 (step S20). This message includes an MBMS Service ID, a UE ID, and an MBMS RB parameter. The MBMS RB parameter is information indicating a channel of the radio bearer. Consequently, the UE 20 can make connection to a common channel, through which the MBMS service data is delivered, to receive the service. The message (step 20) which indicates that the PtP dedicated channel is switched to the PtM common channel is also sent to other UEs which receive the same service.